

Claims

1. A patient turning and lifting device comprising:
a body support with at least one inflatable turning bladder and at least
5 one support pad configured to securely position the turning bladder between a body of
a patient and a patient supporting surface.

2. A patient turning and lifting device as defined in claim 1 wherein the
inflatable turning bladder is releasably secured to the body support by containment
10 within a pocket of the body support that orients the bladder between the patient
supporting surface and the patient's body.

3. A patient turning and lifting device as defined in claim 1 further
comprising left and right inflatable turning bladders securable to the body support and
15 positioned to correspond to the left and right portions of a torso region of a patient
positioned on the body support.

4. A patient turning and lifting device as defined in claim 1 wherein the
inflatable turning bladder extends longitudinally along the body support and has a
20 triangular cross-section to form a turning bladder-shaped bladder for lifting a patient
away from the patient supporting surface.

5. A patient turning and lifting and lifting device as defined in claim 2
further comprising:

25 a bladder pack insert having flexible inelastic walls and forming at least
one interior chamber,

at least one inflatable bladder configured to fit in the bladder pack, and
the bladder pack being configured to fit within a pocket of the body support.

6. A patient turning and lifting device as defined in claim 4 wherein the inflatable turning bladder is formed from flexible material that is substantially inelastic.

5 7. A patient turning and lifting device as defined in claim 1 wherein the support pad comprises an inflatable bladder.

10 8. A patient turning and lifting device as defined in claim 1 wherein the body support comprises a plurality of support pads including a backpad and a side rail on each side of the backpad spaced to closely match the width of a patient's torso to provide lateral support to the patient.

15 9. A patient turning and lifting device as defined in claim 8 wherein the support pads also include a saddle at one end of the backpad, positioned between the side rails and having an elevated surface configured to contact the thighs or buttocks of a patient in the body support to prevent longitudinal sliding of the patient relative to the body support.

20 10. A patient turning and lifting device as defined in claim 9 wherein the saddle is configured to have a triangular cross-section that forms a wedge shape.

25 11. A body support as defined in claim 9 wherein the saddle comprises an inflatable bladder configured to be inflated and deflated in time sequence with the turning bladder to move the patient relative to the patient supporting surface.

12. A patient turning and lifting device as defined in claim 10 wherein the backpad, siderails and saddle each comprise an inflatable bladder.

13. A patient turning and lifting device as defined in claim 1 further comprising a pump system with at least one fluid pump in fluid communication with the at least one inflatable turning bladder for pressurizing the bladder.

5 14. A patient turning and lifting device as defined in claim 13 wherein the fluid pump is electrically operated and further comprises a controller to provide user control of inflation variables.

10 15. A patient turning and lifting device as defined in claim 13 wherein the pump system further comprises a vacuum pump for evacuating the bladder.

16. A patient turning and lifting device as defined in claim 13 wherein the fluid pump comprises a manually operated pump.

15 17. A patient turning and lifting device as defined in claim 13 wherein left and right inflatable turning bladders are provided and a separate pressure pump is provided for each bladder.

20 18. A patient turning and lifting device as defined in claim 17 wherein the support pads define inflatable bladders that are in fluid communication with a fluid pump.

19. A patient turning and lifting device as defined in claim 18 wherein the support pad bladders are in fluid communication with each other.

25 20. A patient turning and lifting device as defined in claim 8 wherein the backpad further comprises a recess for supporting the buttocks of a patient.

- 31 -

21. A patient turning and lifting device as defined in claim 20 wherein the recess is defined by an opening through the backpad surface.

22. A method of turning a patient comprising:
5 providing a body support having left and right inflatable turning bladders and at least one support pad;
placing the body support beneath a patient on a supporting surface so that the inflatable turning bladders are situated between the patient supporting surface and the patient and the left and right bladders coincide with left and right sides of the
10 patient's torso;
alternatingly inflating the left and right inflation bladders to move the body of the patient from the patient supporting surface.

23. A method of turning a patient as defined in claim 22 further comprising:
15 providing a fluid pump system comprising and a pump controller and at least one fluid pump;
setting the controller to operate the pump to inflate the bladders in a desired sequence.

20 24. A method of turning a patient as defined in claim 22 wherein the pump controller is set to inflate the left and right bladders in an alternating sequence to move the left and right sides of the patient away from the supporting surface in an alternating fashion.

25 25. A method as defined in claim 22 further comprising:
providing a manual fluid pump in fluid communication with the inflation bladders and operating the manual fluid pump to inflate at least one bladder to move the body of the patient.

26. A method for turning a patient as defined in claim 22 wherein the support pad comprises an inflatable bladder and the support pad is inflated to help support the patient's body away from the patient supporting surface.

5

27. A method of turning a patient as defined in claim 26 wherein the support pad further comprises a saddle that is inflated and deflated in sequence with the left and right turning bladders to insure that the sacrum of a patient's torso is maintained away from the patient supporting surface.

10

28. A method of turning a patient as defined in claim 26 wherein at least some of the support pads are inflated in sequence with the turning bladders to lift the patient away from the patient supporting surface.